

User Guide

DSL-N16UP / DSL-N16U Series

Wireless - N300 ADSL Modem Router







E8931 First Edition January 2014

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1 Getting to know your wireless router

Package contents

- ☑ DSL-N16U Series Modem Router
- ☑ RJ-45 Network cable
- ☑ AC adapter
- ☑ Support CD (User Manual)
- ☑ RJ-11 Phone cable
- ☑ Splitter (varies with regions)



- If any of the items is damaged or missing, contact ASUS for technical inquiries and support. Refer to the ASUS Support Hotline list at the back of this user manual.
- Keep the original packaging material in case you would need future warranty services such as repair or replacement.





Hardware features

Front



Power LED

Off: No power **On:** Device ready

Flashing slowly: Rescue mode

Flashing quickly: WPS in progress / Restoring settings to default

2 ADSL/WAN LED

Off: No ADSL link or unable to establish ADSL link

Flashing: ADSL connection initializing

On: ADSL link established or Ethernet cable connected

*When an Ethernet cable is connected to the Ethernet WAN port, the ADSL/WAN LED will light up. If an ADSL connection is available, the LED will remain on

3 Internet LED

Off: No power or no Internet connection Flashing: Transmitting or receiving data On: Internet connection established

✓ LAN1~4 LED

Off: No power or no physical connection

On: Has physical connection to an Ethernet network

Flashing: Transmitting or receiving data (through Ethernet cable)

Wireless LED

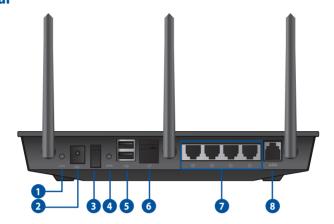
Off: No wireless connection **On:** Wireless system ready

Flashing: Transmitting or receiving data via a wireless connection





Rear



- Reset button
 - This button resets or restores the system to its factory default settings.
- Power (DC-In) port
 Insert the bundled AC adapter into this port and connect your router to a power source.
- 3 Power switch

Press to power on or off the system.

- WPS button*

 Press this button for more than four seconds to establish a secure wireless connection with a WPS-supported wireless device.
 - *The WPS button can be used as a WiFi button by changing the settings in the **Advanced Settings > Administration page**.
- USB 2.0 port
 Insert USB 2.0/USB 1.1 devices such as USB hard disks or USB flash drives into these ports.
- 6 Ethernet WAN port
 Connect an RJ-45 Ethernet cable to this port to establish WAN connection.
- Connect network cables into these ports to establish LAN connection.
- 8 DSL WAN (ADSL) port
 Connect to a splitter or to a telephone outlet via an RJ-11 cable.







DC Power adapter	DC Output : 12V with max 1A current		
Operating Temperature	0~40°C	Storage Temperature	0~70°C
Operating Humidity	50~90%	Storage Humidity	20~90%



Use only the adapter that came with your package. Using other adapters may damage the device.





2 Creating your network

Positioning your router

To get the best wireless network performance from your wireless router, follow the recommendations below:

- Place the wireless router at the center of your network for maximum wireless coverage.
- Keep the device away from metal obstructions and away from direct sunlight.
- Keep the device away from 802.11g or 20MHz only Wi-Fi devices, 2.4GHz computer peripherals, Bluetooth devices, cordless phones, transformers, heavy-duty motors, fluorescent lights, microwave ovens, refrigerators, and other industrial equipment to prevent signal interference or loss.
- To ensure the best wireless signal, orient the three detachable antennas as shown in the drawing below.
- Always update to the latest firmware. Visit the ASUS website at http://www.asus.com to get the latest firmware updates.



What you need

To set up your network, you need one or two computers that meet the following system requirements:

- Ethernet RJ-45 (LAN) port (10Base-T/100Base-TX)
- IEEE 802.11b/g/n wireless capability
- An installed TCP/IP service
- Web browser such as Microsoft Internet Explorer, Mozilla Firefox, Apple Safari, or Google Chrome



- If your computer does not have built-in wireless capabilities, install an IEEE 802.11b/g/n WLAN adapter to your computer to connect to the network.
- The Ethernet RJ-45 cables used to connect the network devices should not exceed 100 meters.



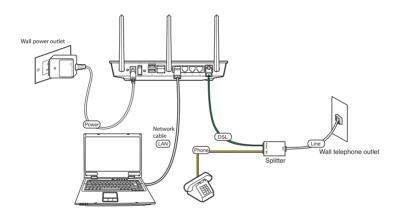


Connecting your devices



- Use a wired connection when setting up your wireless router to avoid possible wireless setup issues.
- Before setting up your ASUS wireless router, do the following:
 - If you are replacing an existing router, disconnect it from your network.
 - Disconnect the cables/wires from your existing modem. If your modem has a backup battery, remove it as well.
 - Reboot your computer (recommended).

Wired connection



To set up your ADSL router via wired connection:

- 1. Insert the splitter's line connector to the phone outlet and connect your phone to the phone port.
- 2. Using the bundled phone cable, connect your DSL-N16U's ADSL port to the splitter's DSL port.
- 3. Using the bundled network cable, connect your computer to the router's LAN port.





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Before you proceed

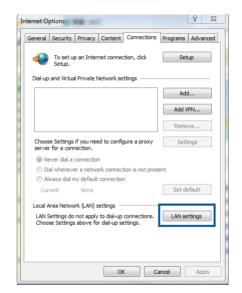


Before configuring your wireless router, apply the steps described in this section to each computer on the network to avoid problems connecting to the wireless network.

A. Disable any configured proxy servers.

Windows® 7

- 1. Click **Start > Internet Explorer**.
- Click Tools > Internet options > Connections tab > LAN settings.







- From the Local Area Network (LAN) Settings window, uncheck Use a proxy server for your LAN.
- 4. Click **OK** then **Apply**.



MAC OSX

 From your Apple Safari browser, click Safari > Preferences > Advanced. On the Proxies item, click Change Settings...



- From the Network screen, uncheck FTP Proxy and Web Proxy (HTTP).
- 3. Click **OK** then **Apply**.





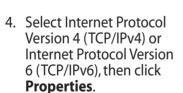




B. Configure TCP/IP settings to automatically obtain an IP address.

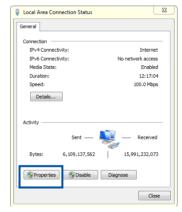
Windows® 7

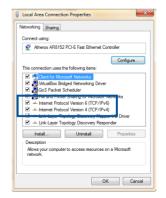
- Click Start > Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings.
- 2. On the Network Connections window, click on **Local Area Connection**.
- 3. On the Local Area Connection Network Status window, click **Properties**.









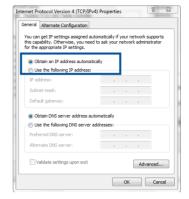








- 6. Tick **Obtain an IP address automatically.**
- 7. Click OK.

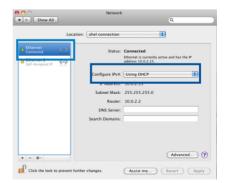


MAC OSX

 Click Apple Menu
 System Preferences > Network



- 2. Click **Ethernet** on the left panel.
- On the Configure IPv4, item select **Using DHCP**.
- 4. Cllick Apply.









1. Ensure that the ADSL/WAN LED on the DSL-N16U front panel is on and not flashing or off.



2. Launch your web browser. The Quick Install Setup (QIS) web page appears automatically and begins detecting your connection type.



If the QIS web page does not appear after you launched your web browser, disable the proxy settings on your web browser.









Logging in to the web GUI (Graphical User Interface)

Your ASUS Wireless Router uses a web-based user interface that allows you to configure the router using any web browser such as Internet Explorer, Mozilla Firefox, Apple Safari, or Google Chrome.

To log in to the web GUI:

- Launch your web browser and manually key in the wireless router's default IP address: <u>192.168.1.1</u> or default domain name: <u>http://router.asus.com.</u>
- 2. On the login page, key in the default user name (**admin**) and password (**admin**).









3. The wireless router GUI provides access to various configuration settings.









To protect your wireless network from unauthorized access, you need to configure its security settings.

To set up the wireless security settings:

- 1. Key in http://192.168.1.1 on your web browser.
- 2. On the login screen, key in the default user name (**admin**) and password (**admin**), then click **OK**. The wireless router's web GUI launches.
- 3. On the Network Map screen, the **System status** area displays the wireless security settings such as SSID, security level, and encryption settings.



- 4. On the **Wireless name (SSID)** field, key in a unique name for your wireless network.
- 5. From the **Authentication Method** dropdown list, select the encryption method for your wireless network.
- 6. Key in your security passkey.
- 7. Click Apply.







To manage your network clients:

- 1. Launch the wireless router's web GUI.
- 2. On the Network Map screen, click the **Clients** icon to display information about your network clients.







Monitoring your USB device

The ASUS Wireless Router provides one USB 2.0 port for connecting USB devices such as a USB storage device and USB printer.



- To use this feature, you need to plug a USB storage device, such as a USB hard disk or USB flash drive, to the USB 2.0 port on the rear panel of your wireless router. Ensure that the USB storage device is formatted and partitioned properly.
- Refer to the Plug-n-Share Disk Support List at http://event.asus.com/networks/disksupport



You first need to create a user account to allow other network clients to access the USB device. For more details, refer to the section **Using AiDisk for sharing files** in this user manual.

To monitor your USB device:

- 1. Launch the wireless router's web GUI.
- 2. On the Network Map screen, select the **USB Disk Status** icon to display information about your USB device.



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3. On the AiDisk Wizard item, click **GO** to set up an FTP server for Internet file sharing.





- For more details on setting up AiDisk, refer to the section
 Using the Network Place (Samba) Share service and Using
 the FTP Share service in this user manual.
- This router works with most USB HDDs/Flash disks (up to 2TB size) and supports read-write access for FAT16, FAT32, EXT2, EXT3, and NTFS.
- To safely remove the USB disk, launch the web GUI (http://
 router.asus.com or http://192.168.1.1), then in the Network
 Map page, click the USB icon > Eject USB disk.
- Incorrect removal of the USB disk may cause data corruption.







Setting up a Guest Network provides wireless Internet connectivity for temporary visitors while restricting access to your private network.

To create your guest network:

- 1. Click **Guest Network** on the left navigation panel.
- 2. Click Enable.
- 3. To configure additional options, click any of the items listed.

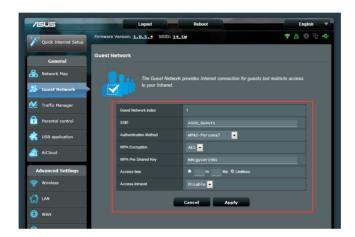






(1)

- 4. Assign a wireless name for your temporary network on the **SSID** field.
- 5. Select an Authentication Method.
- 6. Select a **WEP Encryption** method.
- 7. Specify the **Access time** or click **Limitless**.
- 8. Select Disable or Enable on the **Access Intranet** item.
- 9. Click Apply.







Using the Traffic Manager

Managing QoS (Quality of Service) Bandwidth

The **Quality of Service** feature allows you to set the bandwidth priority and manage network traffic.

To set up QoS:

- 1. Click **Traffic Manager** on the left navigation panel and click the **QoS** tab.
- 2. Click **ON** to enable QoS.
- 3. Input values for **Upload Bandwidth** and **Download Bandwidth**.



Your bandwidth information is available from your ISP.

- 4. Click Save.
- If you want to prioritize specific network applications and network services, click **User-defined Priority** on the upperright hand corner.



6. Adjust the values as needed. Click **Apply**.







Monitoring Traffic

Click the **Traffic Monitor** tab to view the network activity of your Internet, Wired, and Wireless connections for the last 24 hours, daily or in real-time.

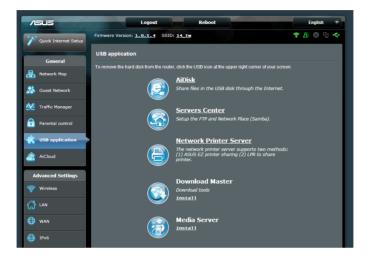








The USB application menu displays several options including AiDisk, Servers Center, and Network Printer Server.



Using AiDisk for File Sharing

AiDisk allows you to share files stored in a connected USB storage device through the network.



Before using AiDisk, connect a USB storage device, such as a USB hard disk or USB flash drive, to the USB 2.0 port on the rear panel of your wireless router. The USB storage device should be formatted and partitioned properly. Refer to the **Plug-n-Share Disk Support List** for disk format, file and partition size at http://event.asus.com/networks/disksupport



To avoid data loss or damage to the USB storage device, always follow the steps to safely remove your USB device.







- 1. Click **USB application** on the left navigation panel and click the **AiDisk icon**.
- 2. From the Welcome to AiDisk wizard screen, click Go.



 Assign access rights to the USB storage device. Select limitless access rights, limited access rights, and admin rights to define read-write privileges to files stored in the USB storage device. Click Next.







- 4. To set up your domain name via the ASUS DDNS service, select I will use the service and accept Terms of service and key in your preferred domain name. Your domain name will follow the format xxx.asuscomm.com, where xxx is your host name.
- 5. Click Next.



- 6. Click Finish.
- 7. To access the USB storage device via FTP from a client on the network, launch a web browser or a third-party FTP client utility and key in the FTP link (**ftp://<domain name>**) you previously created.





Using the Servers Center

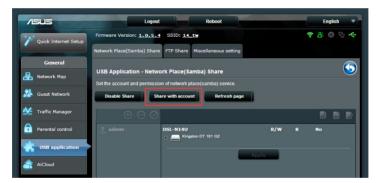
Servers Center provides settings for Samba and FTP Shares.

Using the Network Place (Samba) Share service

The Network Place (Samba) Share feature allows Mac OSX, Windows, and Linux clients to access files on the USB storage device.

To use Samba share:

- 1. Click **USB application** on the left navigation panel and click the **Servers Center** icon.
- 2. Click the **Network place (Samba) Share** tab.
- 3. Click Share with account.



4. Click the **Add** button to create user accounts for users who will be accessing the USB storage device via Samba.







5. Assign a name for the user account and key in a password. Click Add.



- 6. Use the **Modify** and **Delete O O** buttons to change the password or remove the user account.
- 7. Select a user and assign the type of access rights for files or folders located in the storage device:
 - **R/W**: Select this option to assign read/write access for a specific file/folder.
 - R: Select this option to assign read only access for a specific file/folder.
 - No: Select this option if you do not want to share a specific file/folder.



8. Click Apply.





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Your ASUS wireless router can set up the connected USB storage device as an FTP server.

To set up the FTP Share service:

- 1. Configure file sharing using the steps in **Using AiDisk for File Sharing**.
- 2. Click **USB application** on the left navigation panel and click the **Servers Center** icon.
- 3. Click the **FTP Share** tab.
- 4. Click Enable FTP.
- 5. Click Share with account.



- 6. Click the **Add** button to create accounts for users who will be accessing the USB storage device via FTP Server.
- 7. Assign a name for the user account and key in a password. Click **Add**.









- **R/W**: Select this option to assign read/write access for a specific file/folder.
- W: Select this option to assign write only access for a specific file/folder.
- R: Select this option to assign read only access for a specific file/folder.
- No: Select this option if you do not want to share a specific file/folder.



9. Click Apply.

10. To access the FTP server from a client on the network, key in **ftp://<hostname>.asuscomm.com** on a web browser or a third-party FTP utility. Once prompted, key in the account username and password you set up in Step 7.



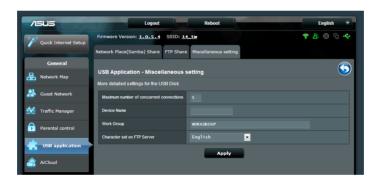




The Miscellaneous settings page allows you to configure additional properties for the USB disk. You can change the maximum number of users who can access the USB storage device, assign a device name and work group, or specify the language settings for the FTP server.

To configure additional USB device settings:

- Click USB application on the left navigation panel and click Servers Center.
- 2. Click the **Miscellaneous setting** tab.
- 3. Specify or change configuration settings as needed.
- 3. Click Apply.









Setting up the DHCP Server

Your wireless router uses DHCP to assign IP addresses automatically on your network. You can specify the IP address range and lease time for the clients on your network.

To configure the DHCP server:

- 1. Click **LAN** on the left navigation panel.
- 2. Click the **DHCP Server** tab.
- 3. In the **Enable the DHCP Server?** field, tick **Yes**.
- 4. In the **IP Pool Starting Address** field, key in the starting IP address.
- 5. In the **IP Pool Ending Address** field, key in the ending IP address
- 6. In the **Lease Time** field, specify in seconds when an assigned IP address will expire. Once it reaches this time limit, the DHCP server will then assign a new IP address.





- ASUS recommeds that you use an IP address format of 192.168.1.xxx (where xxx can be any number between 2 and 254) when specifying an IP address range.
- An IP Pool Starting Address should not be greater than the IP Pool Ending Address.





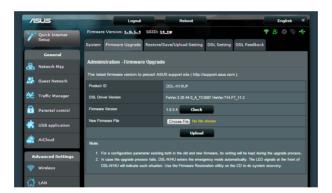
Upgrading the firmware



Download the latest firmware from the ASUS website at http://support.asus.com

To upgrade the firmware:

- 1. Click **Administration** from the left navigation panel.
- 2. Click the Firmware Upgrade tab.
- 3. In the **New Firmware File** item, click **Choose File**. Navigate to the downloaded firmware file.
- 4. Click Upload.





If the upgrade process fails, the wireless router automatically enters rescue mode and the power LED indicator on the front panel starts flashing slowly. To recover or restore the system, use the Firmware Restoration utility.







To restore/save/upload wireless router settings:

- 1. Click **Administration** on the left navigation panel.
- 2. Click the **Restore/Save/Upload Setting** tab.



- 3. Select a task from the configuration options:
 - To restore to default factory settings, click Restore, and click OK once prompted.
 - To save the current system settings, click Save, navigate to the folder where you intend to save the file and click Save.
 - To restore from a saved system settings file, click Browse to locate your file, then click Upload.







Use the Network Printer Setup utility to set up a USB printer on your wireless router and share the printer with other devices on the network.



- To check if your USB printer is compatible with your ASUS wireless router, refer to the Plug-n-Share Disk Support List at http://event.asus.com/networks/printersupport
- The wireless router's printer server function is not supported on Windows® 2000.

To set up your USB Printer:

- 1. Click **USB application** from the left navigation panel, then click **Network Printer Server**.
- 2. Click **Download Now!** in the ASUS EZ printer sharing mode to download the network printer utility.









3. Unzip the downloaded file and click the **Printer.exe** icon to run the network printer setup program.



4. Follow the onscreen instructions to set up your hardware, then click **Next**.



5. Wait for a few minutes for the initial setup to finish. Click **Next**.



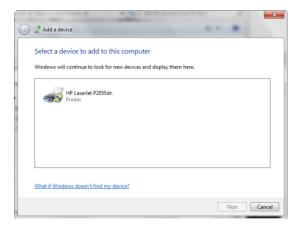
6. Click **Finish** to complete the installation.







7. Follow the Windows® OS instructions to install the printer driver.



8. After printer driver installation is complete, computers on the network will now be able to access the printer.







4 Using the utilities



- Install the wireless router's utilities from the bundled support CD.
- If Autorun is disabled, run **setup.exe** from the root directory of the support CD.

Device Discovery

Device Discovery is an ASUS WLAN utility that detects any ASUS wireless routers available on the wireless network and allows you to configure the device.

To launch the Device Discovery utility:

Click Start > All Programs > ASUS Utility > DSL-N16U Wireless Router > Device Discovery.



When you set the router to Access Point mode, you need to use Device Discovery to get the router's IP address.





Firmware Restoration

Firmware Restoration is used on an ASUS Wireless Router after a failed firmware upgrade. This utility uploads a firmware file to the wireless router. The process takes about three to four minutes.



Launch rescue mode before using the Firmware Restoration utility.

To launch rescue mode and use the Firmware Restoration utility:

- 1. Unplug the wireless router from its power source.
- 2. While holding down the Reset button at the back of the wireless router, plug the wireless router into a power source. Release the Reset button when the Power LED at the front panel begins to flash slowly, which indicates that the wireless router is in rescue mode.
- 3. Use the following to set up your TCP/IP settings:

IP address: 192.168.1.x

Subnet mask: 255.255.255.0

From your computer's desktop, click
 Start > All Programs > ASUS Utility > DSL-N16U Wireless
 Router > Firmware Restoration.



5. Click **Browse** to navigate to the firmware file, then click **Upload**.



The Firmware Restoration utility is not used to upgrade the firmware of a working ASUS Wireless Router. Normal firmware upgrades must be done through the web GUI. Refer to **Upgrading the firmware** for more details.

 \bigcirc





5 Troubleshooting



If you encounter problems that are not mentioned in this chapter, contact ASUS Technical Support.

Troubleshooting

I cannot access the router GUI for configuring the router.

- Delete the cookies and temporary files in your web browser. To do this in Internet Explorer 8:
 - Launch your web browser, then click Tools > Internet Options.
 - 2. On the General tab, click **Delete** under Browsing history.
 - 3. Tick Temporary Internet Files and Cookies. Click Delete.



Instructions for deleting cookies and temporary Internet files vary with the web browser.

 Disable the proxy server settings, remove any dial-up connections, and set the TCP/IP settings to obtain IP addresses automatically. For more details, refer to the section **Before you** proceed in this user manual.

The client cannot establish a wireless connection with the router.

Out of Range:

- •Place the router closer to the wireless client.
- •Change the channel settings.





Authentication:

- Use a wired connection to connect to the router.
- Check the wireless security settings.
- Press the Reset button at the rear panel for more than five seconds.

Cannot find the router:

- Press the Reset button at the rear panel for more than five seconds.
- Check the settings in the wireless adapter such as SSID and encryption method.

Cannot access the Internet using a wireless LAN adapter.

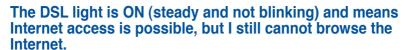
- Place the router closer to the wireless client.
- Check whether the wireless adapter is connected to the correct wireless router.
- Check whether the wireless channel in use conforms to the channels available in your country/area.
- · Check the encryption settings.
- Check if the ADSL connection is connected.
- Use a different Ethernet cable.

Internet is not accessible.

- Check the status indicators on the ADSL modem and the wireless router.
- Check if the WAN LED on the wireless router is on. If the LED is off, switch Ethernet cables and try again.







- Restart your computer.
- Check if the WAN LED on the wireless router is on.
- Check the wireless encryption settings.
- Check if the computer can get an IP address (using both a wired or wireless connection).
- Check that your web browser is configured to use the local LAN and is not configured to use a proxy server.

If the DSL light blinks continuously or stays off, Internet access is not possible - the Router is unable to establish a connection with the ADSL network.

- Ensure that all your cables are properly connected.
- Disconnect the power cord from the ADSL or cable modem, wait a few minutes, then reconnect the cord.
- If the ADSL light continues to blink or stays OFF, contact your Internet service provider.

Network name or encryption keys are forgotten.

- Set up a wired connection and reconfigure the wireless security settings.
- Press the Reset button at the rear panel of the wireless router for more than five seconds.





How do you restore the system to its default settings?

- Press the Reset button at the rear panel of the wireless router for more than five seconds.
- Refer to the section **Restoring/Saving/Uploading settings** of this user manual.

The following are the factory default settings:

User name: admin
Password: admin
Enable DHCP: Yes

IP address: 192.168.1.1

Domain name: (Blank)

Subnet Mask 255.255.255.0 DNS Server 1: 192.168.1.1

DNS Server 2: (Blank) **SSID:** ASUS





ASUS DDNS Service

The ASUS DSL-N16U WiFi Modem Router supports the ASUS DDNS service. If you have registered for the ASUS DDNS service but need to exchange devices at the service center, inform the service center that you want to keep the original domain name and retain the DDNS service. Visit your local service center for more information.



- If there is no activity in the domain such as reconfiguring the router or accessing the registered domain name - within 90 days, the system automatically deletes the registered information.
- If you encounter any problem or difficulty in using your device, contact the service center.

Frequently Asked Questions (FAQs)

1. Will the registered information be lost or registered by others?

If you have not updated the registered information in 90 days, the system automatically deletes the registered information and the domain name may be registered by others.

2. I did not register the ASUS DDNS for the router I bought six months ago. Can I still register it?

Yes, you can still register the ASUS DDNS service for your router. The DDNS service is embedded in your router, so you can register the ASUS DDNS service anytime. Before registering, click **Query** to check if the hostname has been registered or not. If the hostname is available, the system registers the hostname automatically.





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3. I have registered a domain name before and it has been working well until my friends told me that they could not access my domain name.

Check the following:

- 1. Internet connection is available.
- 2. The DNS server is working properly.
- 3. The last time you updated the domain name.

If there are still problems in accessing your domain name, contact the service center.

4. Can I register two domain names so I can access my HTTP and FTP servers separately?

No, you cannot. You can only register one domain name for one router. You can use port mapping to implement both services and make them available from outside your local network.

5. After restarting the router, why is it that I see a different WAN IP address in MS-DOS and in the router configuration page?

This is normal. The interval time between the ISP DNS server and ASUS DDNS results in different WAN IPs in MS-DOS and in the router configuration page. Different ISPs may have different interval times for updating IP addresses.

6. Is the ASUS DDNS service free, or is it just a trial version?

The ASUS DDNS service is a free and embedded service in some ASUS routers. Check your ASUS router if it supports the ASUS DDNS service.





Appendices

Notices

ASUS Recycling/Takeback Services

ASUS recycling and takeback programs come from our commitment to the highest standards for protecting our environment. We believe in providing solutions for you to be able to responsibly recycle our products, batteries, other components, as well as the packaging materials.

Please go to http://csr.asus.com/english/Takeback.htm for the detailed recycling information in different regions.

REACH

Complying with the REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals) regulatory framework, we published the chemical substances in our products at ASUS REACH website at

http://csr.asus.com/english/index.aspx

Federal Communications Commission Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.





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This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Prohibition of Co-location

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter





Safety Information

To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body. Use on the supplied antenna.

Declaration of Conformity for R&TTE directive 1999/5/EC

Essential requirements – Article 3

Protection requirements for health and safety – Article 3.1a Testing for electric safety according to EN 60950-1 has been conducted. These are considered relevant and sufficient.

Protection requirements for electromagnetic compatibility – Article 3.1b

Testing for electromagnetic compatibility according to EN 301 489-1 and EN 301 489-17 has been conducted. These are considered relevant and sufficient.

Effective use of the radio spectrum – Article 3.2

Testing for radio test suites according to EN 300 328- 2 has been conducted. These are considered relevant and sufficient.

CE Mark Warning

This is a Class B product, in a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Canada, Industry Canada (IC) Notices

This Class B digital apparatus complies with Canadian ICES-003 and RSS-210.







Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has been evaluated for and shown compliant with the IC Specific Absorption Rate ("SAR") limits when installed in specific host products operated in portable exposure conditions (antennas are less than 20 centimeters of a person's body).

This device has been certified for use in Canada. Status of the listing in the Industry Canada's REL (Radio Equipment List) can be found at the following web address:

http://www.ic.gc.ca/app/sitt/reltel/srch/nwRdSrch.do?lang=eng

Additional Canadian information on RF exposure also can be found at the following web:

http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html

Canada, avis d'Industry Canada (IC)

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-210.

Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent a ecter son fonctionnement.

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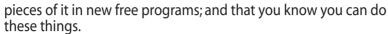
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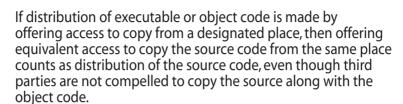
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Region	Country	Hotline Number	Service Hours
3.05	Cyprus	800-92491	09:00-13:00;
	Сургиз	000 72471	14:00-18:00 Mon-Fri
	France	0033-170949400	09:00-18:00 Mon-Fri
		0049-1805010920	
	Germany	0049-1805010923	09:00-18:00 Mon-Fri
		(component support)	10:00-17:00 Mon-Fri
		0049-2102959911 (Fax)	
	Hungary	0036-15054561	09:00-17:30 Mon-Fri
	Italy	199-400089	09:00-13:00 ; 14:00-18:00 Mon-Fri
	Greece	00800-44142044	09:00-13:00 ; 14:00-18:00 Mon-Fri
	Austria	0043-820240513	09:00-18:00 Mon-Fri
	Netherlands/ Luxembourg	0031-591570290	09:00-17:00 Mon-Fri
	Belgium	0032-78150231	09:00-17:00 Mon-Fri
Europe	Norway	0047-2316-2682	09:00-18:00 Mon-Fri
	Sweden	0046-858769407	09:00-18:00 Mon-Fri
	Finland	00358-969379690	10:00-19:00 Mon-Fri
	Denmark	0045-38322943	09:00-18:00 Mon-Fri
	Poland	0048-225718040	08:30-17:30 Mon-Fri
	Spain	0034-902889688	09:00-18:00 Mon-Fri
	Portugal	00351-707500310	09:00-18:00 Mon-Fri
	Slovak Republic	00421-232162621	08:00-17:00 Mon-Fri
	Czech Republic	00420-596766888	08:00-17:00 Mon-Fri
	Switzerland-German	0041-848111010	09:00-18:00 Mon-Fri
	Switzerland-French	0041-848111014	09:00-18:00 Mon-Fri
	Switzerland-Italian	0041-848111012	09:00-18:00 Mon-Fri
	United Kingdom	0044-8448008340	09:00-17:00 Mon-Fri
	Ireland	0035-31890719918	09:00-17:00 Mon-Fri
	Russia and CIS	008-800-100-ASUS	09:00-18:00 Mon-Fri
	Ukraine	0038-0445457727	09:00-18:00 Mon-Fri







Region	Country	Hotline Numbers	Service Hours
	Australia	1300-278788	09:00-18:00 Mon-Fri
	New Zealand	0800-278788	09:00-18:00 Mon-Fri
	Japan	0800-1232787	09:00-18:00 Mon-Fri
		0800-1232/8/	09:00-17:00 Sat-Sun
		0081-473905630	09:00-18:00 Mon-Fri
		(Non-Toll Free)	09:00-17:00 Sat-Sun
	Korea	0082-215666868	09:30-17:00 Mon-Fri
	Thailand	0066-24011717	09:00-18:00 Mon-Fri
		1800-8525201	
	Singapore	0065-64157917	11:00-19:00 Mon-Fri
Asia-Pacific		0065-67203835	11:00-19:00 Mon-Fri
		(Repair Status Only)	11:00-13:00 Sat
	Malaysia	0060-320535077	10:00-19:00 Mon-Fri
	Philippine	1800-18550163	09:00-18:00 Mon-Fri
	India	1800-2090365	09:00-18:00 Mon-Sat
	India(WL/NW)		09:00-21:00 Mon-Sun
	Indonesia	0062-2129495000	09:30-17:00 Mon-Fri
		500128 (Local Only)	9:30 – 12:00 Sat
	Vietnam	1900-555581	08:00-12:00
	7100110111		13:30-17:30 Mon-Sat
	Hong Kong	00852-35824770	10:00-19:00 Mon-Sat
	USA	1-812-282-2787	8:30-12:00 EST Mon-Fri
Americas	Canada		9:00-18:00 EST Sat-Sun
	Mexico	001-8008367847	08:00-20:00 CST Mon-Fri
			08:00-15:00 CST Sat







Region	Country	Hotline Numbers	Service Hours
Middle East + Africa	Egypt	800-2787349	09:00-18:00 Sun-Thu
	Saudi Arabia	800-1212787	09:00-18:00 Sat-Wed
	UAE	00971-42958941	09:00-18:00 Sun-Thu
	Turkey	0090-2165243000	09:00-18:00 Mon-Fri
	South Africa	0861-278772	08:00-17:00 Mon-Fri
	Israel	*6557/00972-39142800	08:00-17:00 Sun-Thu
		*9770/00972-35598555	08:30-17:30 Sun-Thu
	Romania	0040-213301786	09:00-18:30 Mon-Fri
Balkan Countries	Bosnia Herzegovina	00387-33773163	09:00-17:00 Mon-Fri
	Bulgaria	00359-70014411	09:30-18:30 Mon-Fri
		00359-29889170	09:30-18:00 Mon-Fri
	Croatia	00385-16401111	09:00-17:00 Mon-Fri
	Montenegro	00382-20608251	09:00-17:00 Mon-Fri
	Serbia	00381-112070677	09:00-17:00 Mon-Fri
	Slovenia	00368-59045400	08:00-16:00 Mon-Fri
		00368-59045401	
	Estonia	00372-6671796	09:00-18:00 Mon-Fri
	Latvia	00371-67408838	09:00-18:00 Mon-Fri
	Lithuania-Kaunas	00370-37329000	09:00-18:00 Mon-Fri
	Lithuania-Vilnius	00370-522101160	09:00-18:00 Mon-Fri



For more information, visit the ASUS support site at: http://support.asus.com





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